



#4

"PATENT"

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
WILLIAM F. AVRIN ET AL.	)	Group No: 3737
	)	
SERIAL NO.: 09/818,700	)	
	)	
FILED: 27 March 2001	)	Examiner: UNKNOWN
	)	
FOR: SIMPLIFIED WATER-BAG TECHNIQUE	)	
FOR MAGNETIC SUSCEPTIBILITY	)	
MEASUREMENTS ON THE HUMAN	)	
BODY AND OTHER SPECIMENS	)	

Commissioner for Patents  
Washington, D.C. 20231

Sir:

**INFORMATION DISCLOSURE STATEMENT**

Applicant hereby cites the documents listed in accompanying Form PTO-1449 with respect to the above-referenced patent application under the provisions of 37 C.F.R., Sections 1.56, 1.97 and 1.98. Except for the Farrell publication, copies of the documents are not attached because they were all cited in the parent application.


The filing of this Information Disclosure Statement will not be construed to mean that a search was conducted or that no other material information, as defined by 37 C.F.R. 1.56, exists.

It is Applicant's opinion that the essential features of the invention are neither described in nor obvious from any of the references mentioned above, whether taken individually or in any reasonable combination.

The Examiner is respectfully requested to make the listed documents of record in connection with the prosecution of the subjection application.

Respectfully submitted,

WILLIAM F. AVRIN ET AL.

By:   
Lawrence A. Maxham  
Attorney for Applicant(s)  
Registration No. 24,483

THE MAXHAM FIRM  
Symphony Towers  
750 "B" Street, Suite 3100  
San Diego, California 92101  
Telephone: (619) 233-9004

Form PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**

(Use Several Sheets If Necessary)

JUN 08 2001

Docket No.: 1502-088CON

Application No. : 09/818,700

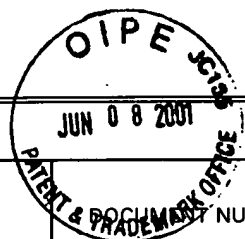
Applicant: William F. Avrin et al.

Filing Date: 27 March 2001

Group Art Unit: 3737

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,431,005	02/84	McCormick	128	656	
	4,709,213	11/87	Padhrasky	324	329	
	5,057,095	10/91	Fabian	604	362	
	5,099,845	03/92	Besz et al.	128	653	
	5,105,829	04/92	Fabian et al.	128	899	
	5,107,862	04/92	Fabian et al.	128	899	
	5,188,126	02/93	Fabian et al.	128	899	
	5,190,059	03/93	Fabian et al.	128	899	
	5,353,807	10/94	DeMarco	128	772	
	5,425,382	06/95	Golden et al.	128	899	
	5,456,718	10/95	Szymaitis	623	11	
	5,494,033	02/96	Buchanan et al.	128	653	
	5,558,091	09/96	Acker et al.	128	653	
	4,801,882	01/89	Daalmans	324	248	
	4,827,217	05/89	Paulson	324	248	
	4,969,469	08/93	Mills	128	653	
	5,233,992	08/93	Holt et al.	128	653.2	
	5,268,165	12/93	Hedlund et al.	424	9	
	5,305,751	04/94	Chopp et al.	128	654	
	5,322,682	06/94	Bartzokis et al.	424	9	
	5,384,109	01/95	Klaveness et al.	424	9	
	5,408,178	04/95	Wikswow et al.	324	201	
	5,735,279	04/98	Klaveness et al.	128	654	
	5,686,836	12/98	Sasada et al.	324	244	
	5,842,986	12/98	Avrin et al.	600	407	



## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Farrell et al., "Magnetic Measurement of Human Iron Stores," IEEE Trans. On Magnetics, Vol. Mag. 16, No.5, pp.818-823 (Sept. 1990)
		C.M. Bastuscheck, "Technique for Measuring the AC Susceptibility of Portions of the Human Body or Other Large Objects," J. Appl. Phys. 58 (10), pp. 3896-3906 (1985).
		F.M. Bryden, "Real Time Ultrasound in the Assessment of Intraocular Foreign Bodies," Eye 4, pp. 727-731 (1990).
		E. Costa Monteiro, "Magnetic Measurement Techniques for Locating Foreign Bodies in Humans," Tenth International Conference on Biomagnetism, p. 314 (1996).
		E.J. Finn, "Ferromagnetic Materials in Patients: Detection Before MR Imaging," Radiology 156, pp. 139-141 (1985).
		R.E. Greenblatt, "Probabilistic Reconstruction of Multiple Sources in the Bioelectromagnetic Inverse Problem," Inverse Problems 9, pp. 271-284 (1992).
		E. Kanal, "Aneurysm Clip Testing for Ferromagnetic Properties: Clip Variability Issues," Radiology, pp. 576-578, (1995).
		Mentor Corporation, "The Detector, Injection Port Detection System," Brochure, 6 pp., (1996).
		D.N. Paulson, "Biomagnetic Susceptometer with SQUID Instrumentation," IEEE Transactions on Magnetics, Vol. 27, No. 2, pp. 3249-3252 (1990).
		D.N. Paulson, "The Hamburg Biosusceptometer for Liver Iron Quantification," Advances in Biomagnetism, pp. 497-500, (Date Unknown).
		K. Sekihara, "Reduction of Brain Noise Influence in Evoked Neuromagnetic Source Localization Using Noise Spatial Correlation," Phys. Med. Biol. 39, pp. 937-946, (1993).
		N. Sepulveda, "Magnetic Susceptibility Tomography for Three-Dimensional Imaging of Diamagnetic and Paramagnetic Objects," IEEE Transactions on Magnetics, Vol. 30, No. 6, pp. 6062-5069, (1993).
		F.G. Shellock, "Magnetic Resonance," Bioeffects, Safety and Patient Management, pp. 115-126, (1996).
		N. Smith, "A High-Sensitivity Magnetoresistive Magnetometer," J. Appl. Phys. 69 (8), pp. 5082-5084 (1991).
		B. Scholz, "Probability-Based Current Dipole Localization from Biomagnetic Fields," IEEE Transactions on Biomedical Engineering, Vol. 41, No. 8, pp. 735-742 (1993).
		W.M. Wynn, "Advanced Superconducting Gradiometer/Magnetometer Arrays and a Novel Signal Processing Technique," IEEE Transactions on Magnetics, Vol. MAG-11, No. 2, pp. 701-707, (1974).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant. (2/92 PTO)